

Notice of Allowability

Application No.

10/527,978

Examiner

Andrew C. Lee

Applicant(s)

STEPHENS ET AL.

Art Unit

2476

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated 05/12/2010.
2. ☒ The allowed claim(s) is/are 1-26-35, 46; 36-44;48 renumbered 1-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 6/29/2010.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Salman Ahmed/
Primary Examiner, Art Unit 2476

/Andrew C Lee/
Examiner, Art Unit 2476

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Anatoly Frenkel on 6/28/2010.
3. The application has been amended as follows:
 - Claims 45 and 47 have been canceled.
 - Claim 45 (canceled)
 - Claim 47 (canceled)
 - Claims 1, 36 and 38 have been amended as following:
 - Claim 1 has been amended as below:
 1. (Currently Amended) A system, comprising:
 - a plurality of distributed access points each being divided into two or more groups of components distributed through corresponding two or more nodes of a plurality of nodes of a communication network in said system, each of said two or more groups comprising one or more components, wherein one of said two or more groups comprises a radio frequency layer component and another of said two or more groups comprises an access point software layer component, said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with one or more other nodes of said two or more nodes to provide communications between said two or more groups of components in order to

provide an intended functionality of said distributed access points, wherein at least one component of one group of said two or more groups of components located in one node of said plurality of nodes is a part of two or more distributed access points of said plurality of distributed access points, such that said at least one component is configured to establish a remote communication link with corresponding further components, each of said corresponding further components comprised in a further group of said two or more groups of components and located in one of two or more different further nodes of said plurality of nodes, said further components being parts of corresponding said two or more distributed access points, in order to provide said intended functionality of said two or more distributed access points, wherein a number of components needed to provide said plurality of the distributed access points in said communication network is reduced compared to a number of components needed to provide the same plurality of access points implemented as stand-alone units.

- Claim 36 has been amended as below:

36. (Currently Amended) A method, comprising:

receiving or transmitting communication signals by any distributed access point of a plurality of the distributed access points of a communication network in a system for further processing, each of the plurality of the distributed access points being divided into two or more groups of components distributed through corresponding two or more nodes of a plurality of nodes of said communication network, each of said two or more groups comprising one or more components, wherein one of said two or more groups comprises a radio frequency layer component and another of said two or more groups comprises an access point software layer component, said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with other nodes of said two or more nodes to provide communications between said two or more groups of components in order to provide an intended functionality of said distributed access points, wherein at least one component of one group of said two or more groups of components located in one node of said

plurality of nodes is a part of two or more distributed access points of said plurality of distributed access points, such that said at least one component is configured to establish a remote communication link with corresponding further components, each of said corresponding further components comprised in a further group of said two or more groups of components and located in one of two or more different further nodes of said plurality of nodes, said further components being parts of corresponding said two or more distributed access points, in order to provide said intended functionality of said two or more distributed access points, wherein a number of components needed to provide said plurality of the distributed access points in said communication network is reduced compared to a number of components needed to provide the same plurality of access points implemented as stand-alone units.

- Claim 48 has been amended as below:

48. (Currently Amended) A distributed access point, comprising:

two or more groups of components distributed through corresponding two or more nodes of a communication network, each of said two or more groups comprising one or more components, wherein one of said two or more groups comprises a radio frequency layer component and another of said two or more groups comprises an access point software layer component, said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with one or more of other nodes of said two or more nodes to provide communications between said two or more groups of components in order to provide an intended functionality of said distributed access point, wherein at least one component of one group of said two or more groups of components located in one node of said plurality of nodes is a part of two or more distributed access points of said plurality of distributed access points, such that said at least one component is configured to establish a remote communication link with corresponding further components, each of said corresponding further components comprised in a further group of said two or more groups of components and located in one of two or more different further nodes of said plurality of nodes, said further components being parts of corresponding said two or more

distributed access points, in order to provide said intended functionality of said two or more distributed access points, wherein a number of components needed to provide said plurality of the distributed access points in said communication network is reduced compared to a number of components needed to provide the same plurality of access points implemented as stand-alone units.

Allowable Subject Matter

4. Claims 1, 26 – 35, 46; 36 – 44, 48 are allowed.
5. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, does not disclose explicitly the limitations of:

"said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with other nodes of said two or more nodes to provide communications between said two or more groups of components in order to provide an intended functionality of said distributed access points, wherein at least one component of one group of said two or more groups of components located in one node of said plurality of nodes is a part of two or more distributed access points of said plurality of distributed access points, such that said at least one component is configured to establish a remote communication link with corresponding further components, each of said corresponding further components comprised in a further group of said two or more groups of components and located in one of two or more different further nodes of said plurality of nodes, said further components being parts of corresponding said two or more distributed access points, in order to provide said intended functionality of said two or more distributed access points, wherein a number of components needed to provide said plurality of the distributed access points in said communication network is reduced compared to a number of components needed to provide the same plurality of access points implemented as stand-alone units." as disclosed in claim 1.

"said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with other nodes of said two or more nodes to provide communications between said two or more groups of components in order to provide an intended functionality of said distributed access points, wherein at least one component of one group of said two or more groups of components located in one node of said plurality of nodes is a part of two or more distributed access points of said plurality of distributed access points, such that said at least one component is configured to establish a remote communication link with corresponding further components, each of said corresponding further components comprised in a further group of said two or more groups of components and located in one of two or more different further nodes of said plurality of nodes, said further components being parts of corresponding said two or more distributed access points, in order to provide said intended functionality of said two or more distributed access points, wherein a number of components needed to provide said plurality of the distributed access points in said communication network is reduced compared to a number of components needed to provide the same plurality of access points implemented as stand-alone units." as disclosed in claim 36.

"said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with one or more of other nodes of said two or more nodes to provide communications between said two or more groups of components in order to provide an intended functionality of said distributed access point, wherein at least one component of one group of said two or more groups of components located in one node of said plurality of nodes is a part of two or more distributed access points of said plurality of distributed access points, such that said at least one component is configured to establish a remote communication link with corresponding further components, each of said corresponding further components comprised in a further group of said two or more groups of components and located in one of two or more different further nodes of said plurality of nodes, said further components being parts of corresponding said two or more

distributed access points, in order to provide said intended functionality of said two or more distributed access points, wherein a number of components needed to provide said plurality of the distributed access points in said communication network is reduced compared to a number of components needed to provide the same plurality of access points implemented as stand-alone units." as disclosed in claim 48.

6. Additionally, all of the further limitations in claims 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 46, 37, 38, 39, 40, 41, 42, 43, 44 are allowable, since the claims are dependent upon independent claims, respectively.
7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2476
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/Salman Ahmed/
Primary Examiner, Art Unit 2476